CLAIMS

1.   A reversing train positioning system for engaging and moving a railroad car or a trip of coupled cars by engaging bogey wheel truck frames from one side comprising:

(a)   a dog carriage guideway spaced from and parallel to a railroad track;

(b)   a dog carriage mounted to operate along said guideway;

(c)   a carriage drive system including a motor mounted on said dog carriage for operating said dog carriage along said guideway;

(d)   a first dog member pivotally attached to said dog carriage mounted to pivot in a generally horizontal plane between a retracted position and an extended position wherein said first dog member is positioned to engage a proximate bogey wheel truck frame in a first direction and be deflected by said bogey frame in said first direction in the event that a force limit is exceeded;

(e)   a second dog member pivotally attached to said dog carriage in opposed spaced relation to said first dog member mounted to pivot in a generally horizontal plane between a retracted position and an extended position wherein said second dog member is positioned to engage said bogey wheel truck frame in a second direction and be deflected by said bogey frame in said second direction in the event that a force limit is exceeded;

(f)   a first actuating device for pivoting said first dog member;

(g)   second actuating device for pivoting said

second dog member, whereby said first and
second dogs and actuating devices operate
independently; and

(h) flexible supply system attached to move with
said carriage and supply operating power to
said carriage.

2. A train positioning system as in claim 1
wherein each dog is operated by a double-acting fluid
cylinder and wherein said flexible supply system further
supplies operating fluid power to said carriage.

3. A train positioning system as in claim 1
wherein said first and second dogs are mounted to pivot
toward each other when deployed.

4. A train positioning system as in claim 2
wherein said first and second dogs are mounted to pivot
toward each other when deployed.

5. A train positioning system as in claim 1
wherein each dog is operated by a corresponding fluid
cylinder in a manner such that when a dog is fully
deployed, a corresponding fluid cylinder rod is fully
retracted and the dog pulls against a retracted cylinder
rod when engaging a bogey frame and extends said
associated cylinder rod when it is deflected by said
bogey frame.

6. A train positioning system as in claim 2
wherein each dog is operated by a corresponding fluid
cylinder in a manner such that when a dog is fully
deployed, a corresponding fluid cylinder rod is fully
retracted and the dog pulls against a retracted cylinder
rod when engaging a bogey frame and extends said
associated cylinder rod when it is deflected by said
bogey frame.

7. A train positioning system as in claim 4
wherein each dog is operated by a corresponding fluid

cylinder in a manner such that when a dog is fully deployed, the corresponding fluid cylinder rod is fully retracted and the dog pulls against a retracted cylinder rod when engaging a bogey frame and extends said associated cylinder rod when it is deflected by said bogey frame.

8. A train positioning system as in claim 1 wherein said carriage drive system comprises a single tension chain engaged by gears driven by said motor.

9. A train positioning system as in claim 7 wherein said carriage drive system further comprises a tensioning system for controlling tension in said tension chain.

10. A train positioning system as in claim 8 wherein said tension control system further includes a pair of spaced, oppositely disposed pressurized cylinders.

11. A train positioning system as in claim 9 wherein said tension control system further comprises a device for adjusting the relative position of at least one of said cylinders for use in installing said tension chain.

12. A train positioning system as in claim 1 further comprising a non-contact detector for detecting the presence of a bogey frame in the vicinity of said carriage.

13. A train positioning system as in claim 11 wherein said detector is optical.

14. A train positioning system as in claim 11 wherein said detector includes a proximity detecting device.

15. A train positioning system as in claim 1 further comprising detectors for indicating the position of each of said dogs.

16. A train positioning system as in claim 1 wherein said motor is a hydraulic motor.

17. A train positioning system as in claim 1 wherein said carriage further carries a hydraulic system on board.

18. A train positioning system as in claim 5 wherein said carriage further carries a hydraulic system on board.

19. A method of positioning a train using the system of claim 1 including the steps:

    (a)   using a non-contact detector for detecting the presence of a bogey frame in the vicinity of said dog carriage;

    (b)   confirming that the dogs are retracted prior to step (a); and

    (c)   deploying a single appropriate dog upon the detection of a proximate bogey frame.